

# Air Float Capstan Servo (AFCS) Rotary Tables

## RT40-AFCS



RT40 Face Plate Geometry Specifications

Description	Accuracy Grades		
	30	50	100
<b>Face Plate Runout</b> at 18.5 in. (469.9 mm) Radius	0.000120 (.00305 mm)	0.000200 (.0051 mm)	0.000400 (.0102 mm)
<b>Base Runout</b> at 20.5 in. (520.7 mm) Radius	0.000120 (.00305 mm)	0.000200 (.0051 mm)	0.000400 (.0102 mm)
<b>Face Plate Dish</b> (Flatness)	0.000120 (.00305 mm)	0.000200 (.0051 mm)	0.000400 (.0102 mm)
<b>Center Pilot Runout</b>	0.000050 (.00127 mm)	0.000100 (.0025 mm)	0.000200 (.0051 mm)

Note- Geometry Specifications apply when the Air Float Rotary Table is locked. (Air Float off)

Load Capacity Radial	Load Capacity Thrust	Operating Air Pressure	Air Flow	RT Weight
800 lbs. (364 kg)	20,785 lbs. (9,448 kg)	80 PSI (5.5 Bar)	60 CFH (1.70 m <sup>3</sup> /h)	1,960 lbs. (889 kg)

## RT40 Servo Drive Options

Description	Drive Options			
	585	780	1092	1482
Drive Motor	PMI U16M4T	PMI U16M4T	PMI U16M4T	PMI U16M4T
Tachometer	Yes	Yes	Yes	Yes
Ratio	585:1	780:1	1092:1	1482:1
Maximum RPM	5.1	3.8	2.7	2.0

Performance Grade (Reflected Load Inertia Ratio)							
Drive Ratio	0.5	0.75	1	1.25	1.5	1.75	2
		Inertia Capacity (lb-ft <sup>2</sup> )					
<b>585</b>	1,219	2,825	4,430	6,035	7,640	9,246	10,851
<b>780</b>	3,027	5,880	8,734	11,587	14,441	17,294	20,147
<b>1092</b>	7,586	13,179	18,772	24,364	29,957	35,550	41,142
<b>1482</b>	15,966	26,267	36,568	46,869	57,169	67,470	77,771
	Inertia Capacity (kg-m <sup>2</sup> )						
<b>585</b>	51	119	187	254	322	390	457
<b>780</b>	128	248	368	488	609	729	849
<b>1092</b>	320	555	791	1,027	1,262	1,498	1,734
<b>1482</b>	673	1,107	1,541	1,975	2,409	2,843	3,277